



# *Pacific Bird Observer*

NEWSLETTER OF THE PACIFIC OCEAN BIOLOGICAL SURVEY PROGRAM, SMITHSONIAN INSTITUTION, WASHINGTON, D.C.

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## NEWELL'S SHEARWATER... A RARE BIRD

Newell's Shearwater is a fairly small, black and white seabird which was believed to be extinct until about 15 years ago. It is known to breed only in the main Hawaiian Islands. In the last century before its population declined, the Hawaiian natives knew the bird well. They called it "Ao" which describes quite well the eerie wails it makes as it sails in search of its nest site in the dark. The young Aos were sought after as a prized meal, fit for a king. In fact, Ao flesh was kapu, forbidden, to the common folk.

Even in the old days in Hawaii when Aos were plentiful, it took determination and sometimes bravery to find them. They prefer to nest on the faces of precipitous cliffs where they burrow into the earth to construct a tunnel which may be several feet long. At the end of the tunnel they lay their one egg and the young are hatched and grow up in near darkness and total privacy. The Hawaiians found that a long branched stick would catch in the downy feathers of young birds and in this manner they could be extracted from their burrows.

Toward the end of the nineteenth century the mongoose was introduced to the Hawaiian Islands at the insistence of the sugar cane growers in the hope of controlling rats. The mongoose has a broad appetite, however, and ground-nesting birds undoubtedly form a large part of its diet. It is more than just coincidence that Kauai, the only main island on which the mongoose was not introduced, now is the only remaining stronghold of the Newell's Shearwater, and for 50 years no records of its occurrence were made public.

Due to the efforts of the Hawaii Fish and Game Service and the Pacific Ocean Biological Survey Program, the Newell's Shearwater is once more well known. The birds have received publicity in Hawaii's newspapers because of their curious habit of "falling" out of the sky at night from May to October in areas which are strongly lighted. Actually, the birds are attracted to the lights only on cloudy or moonless nights when they have difficulty finding their way into the mountains to their nest sites. Evidently the lights disorient them



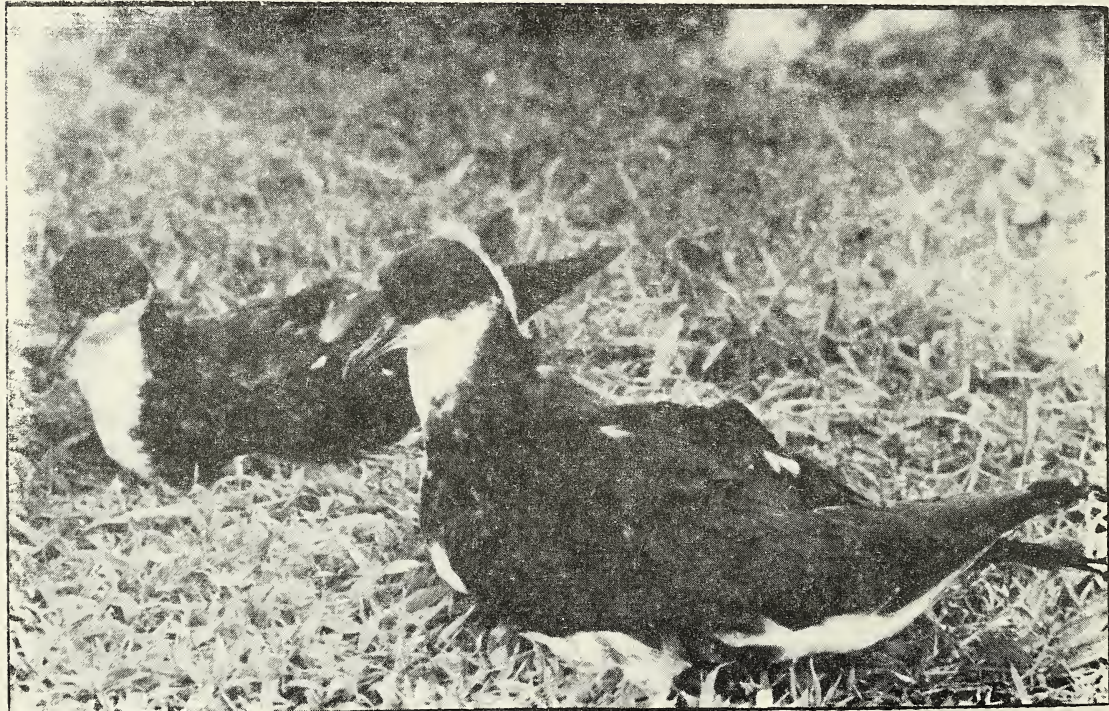
because they are known to strike windows, cars, and lighthouses. Since the birds feed exclusively at sea where the trade winds blow, they are dependent on the wind to make their graceful banking and gliding flight efficient. They have evolved long thin wings which makes this kind of flight possible at the expense of maneuverability and control at slow speeds. As a result they "brake" poorly before landing and tend to crash-land more often than not.

We have attempted to relocate their nesting sites and over 50 birds have been banded and released. Observations of their distribution at sea have shown that they disperse widely after their breeding cycle is completed. They have been recorded on Johnston Atoll. Wake

Island, and the Marianas. The exact limits of their migration are still unknown but we suspect they head mainly southeast from Kauai in October and return in April.

Newell's Shearwater is more likely to be seen at sea than on islands. It may be told from other seabirds by its black upper parts, white underparts and greyish hooked bill. In flight it holds its wings stiffly and intersperses rapid wingbeats with graceful glides. Care must be taken not to confuse this bird with the more common shearwaters or petrels of the Pacific. Because it has become rare, its range and movements are of special interest to ornithologists. Any information on this bird is of great importance to us.

-Warren B. King



Two Newell's Shearwaters at Kilauea Point, Kauai. The traces of soft downy feathers clinging to the back of the neck of the bird in the foreground indicate that it has just recently left its nest.

Photo by Warren B. King





Newell's Shearwater at Kilauea Point, Kauai.

Photo by Warren B. King

### FIELD DIRECTOR LEAVES

Dr. Charles A. Ely who has been the Field Director for the POBSP since 1963 has resigned to return to the position of Associate Professor of Zoology at Ft. Hays Kansas State College, Hays, Kansas, from which he has been on leave. Dr. Ely taught at Ft. Hays from 1960 through June of 1963. Before his employment there, he had completed undergraduate work in zoology at Pennsylvania State College in 1955 and received his Master's and Doctor of Philosophy degrees at the University of Oklahoma in 1957 and 1960 respectively.

Dr. Ely's wife, Janice, served as secretary of the Pacific Program during the two years which they lived in Honolulu. Dr. Ely was a Board Member of the Hawaii Audubon Society and Mrs. Ely was its Secretary. Dr. Robert L. Pyle, of Washington D. C., is the new Field Director for the Pacific Program. Dr. Pyle is on leave from the National Environmental Satellite Center of the U. S. Department of Commerce. Dr. Pyle was employed at the Oahu Research Center in Honolulu from 1953-1956 and is no stranger to the Hawaiian area.

## PROJECT SEEKS HELP FROM PACIFIC RESIDENTS

Interested persons living in the Pacific are urged to assist our study of Pacific birds by sending us your personal observations. Although we have scientists stationed in the Pacific, there are many islands, some of which are substantially populated, that are not covered by their studies. Observations made by interested laymen are often just as useful as those made by scientists and will help fill these gaps.

Your letters giving information such as the local breeding and migration schedules for various species, approximate numbers of a migratory species there at any one time, etc., would be especially appreciated. Also useful are interesting photographs from your area, particularly if of a bird which is not commonly found there.

We look forward to publishing appropriate contributions in future issues.

-Editor



Letters to us concerning our program in the Pacific, requests to be put on our free mailing list for the Pacific Bird Observer, and contributions for future issues, should be addressed to Pacific Bird Observer, Pacific Ocean Biological Survey Program, Smithsonian Institution, Washington, D. C. 20560.

# The Red-tailed Tropicbird

The Red-tailed Tropicbird, found in the tropical regions of the Pacific and Indian Oceans, is one of three species of Tropicbirds. Some consider it more beautiful than the other two species, the White-tailed (or Yellow-billed) and Red-billed Tropicbirds. Tropicbirds are distinguished by their two extraordinarily long central tail feathers, which may be longer than the bird's body. The Tropicbird has been called "marlin-spike" because of the resemblance of its tail feathers to this instrument, but a more commonly used name is "bo'sun bird," a name derived from the Red-tailed Tropicbird's piercing call, which British sailors thought to resemble that of a boatswain's pipe. The Red-tailed Tropicbird's attractive tail feathers have made it the prey of many hunters. These hunters sold the long red plumes to feather merchants, who used them to decorate milady's hat. Feather poaching reached its peak in the beginning of the twentieth century. A United States vessel, the Iroquois, stopped at Laysan Island, Hawaiian Leewards, to evict 75 poachers in 1904 in an early official action against this trade.

The Red-tailed Tropicbird has all white plumage, except for a black marking in front of the eyes, a red bill, and the long red tail feathers. About 18 inches long, it has a wingspan of 35-40 inches.

Adults often have a rose flush to their feathers, while immatures are satin-white with black barring on the back and head. Nestlings are covered with pale gray down.

These birds are most often

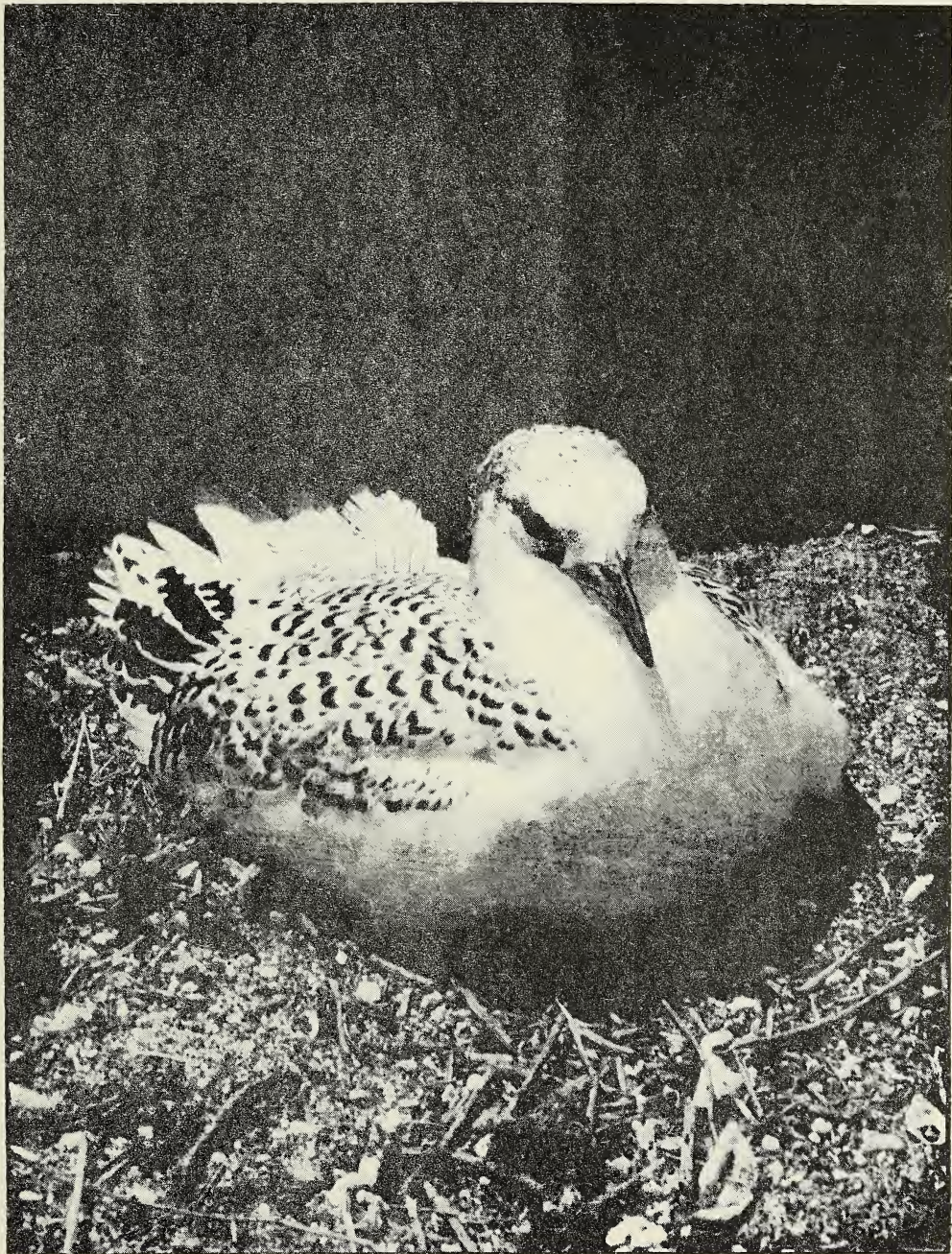
seen at sea alone or in small groups. They flap their wings slowly as they fly high above the water searching for food, although their curious nature attracts them to any approaching ship, and they circle intently around the mast top. Their food is flying fish and squid. The bird feeds by diving from heights of twenty to forty feet above the water, sometimes staying under the water for as long as 26 seconds.

Breeding occurs throughout the year on some islands. Here the birds congregate in groups of up to twelve. During their aerial courtship display, Red-tailed Tropicbirds circle around one another, emitting harsh cries and switching their red tail feathers from side to side. When nesting the Red-tailed Tropicbird makes a shallow scrape in which it lays a single egg, which is incubated by both parents. On high volcanic islands, such as Necker Island in the Hawaiian Leewards, the nest scrape is in a nook on the cliff face, while on low sandy atolls the birds nest under rocks, fallen logs, or in dense vegetation, as on Cook Island, Christmas Atoll. The handsome egg is speckled with reddish-brown spots on a dirty white background. These birds do not readily leave their nests when disturbed; rather, they set up a raucous cry of protest, the chick in a higher pitch than its parent.

The Pacific Ocean Biological Survey Program has traced little inter-island movement among tropicbirds, despite their widespread presence in the Pacific.

Donna Shapiro





Immature Red-tailed Tropicbird under a coral slab.  
Note the black barring on smooth white plumage.

Photo by R.B.Clapp



## What's in a Name?

An interesting problem for the P.O.B.S.P. is the variety of names used by different nationalities to identify the same bird. This sometimes produces bizarre misunderstandings in bird identification.

Not long ago the Fish and Wildlife Service in Washington, DC, received an interesting letter concerning one of the birds banded by the P.O.B.S.P. The letter was from W. R. Ferguson, a missionary in the Solomon Islands. An excerpt reads as follows:

"The other day a native lad named Philip Kera, without much trouble...managed to catch a frigate bird when he was fishing...at Ghatere on the island of Kolomban-gara in the Solomon islands."

Mr. Ferguson has lived in the Solomon area since 1946, and has been much interested in the derivation of native names. Upon asking the meaning of a name he once was quickly given the answer "Belama." ("Belama" is the native word for frigatebird, which, in these islands, is regarded as the greatest bird in the sky.)

It is the philosophy of the island that out of respect to a father-in-law, a son-in-law should use the words "Belama" or "Makasi" meaning tuna, the greatest fish in the sea, as a form of praise.

In another letter to the U.S. Fish and Wildlife Service from Papua, New Guinea, the natives, not knowing the scientific name of the frigatebird call it "Otoai" meaning "Wind Bird."

From Jaluit Atoll in the Marshall Islands we have obtained

several native names for the local birds. They are:

Golden Plover - Koloej  
Fairy Tern - Mejo  
Common Noddy - Bejwak  
Hawaiian Noddy - Jkar  
Brown Booby - Kalo

Scientific names are used by scientists in order to avoid the confusion that a number of different common names might produce. For example, frigatebirds are classified as great or lesser according to the other species in the area, and are specifically designated only by the terms Fregata magnificens, Fregata minor, and Fregata ariel.

The Pacific Ocean Biological Survey Program is interested in the names given by the natives to their local birds. We would greatly appreciate any information our readers could send us.

- Anne K. Poulson

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The Pacific Bird Observer would like to thank those in the Southern Pacific area who have offered to publicize our program and to encourage people to report sightings of banded birds.

Mr. Bruce Turner, Senior Librarian, Library Services of Western Samoa, has offered to distribute the Pacific Bird Observer through the library and its bookmobiles. He has also offered to publicize the procedure for reporting banded birds on his radio program on station 2 AP.

Mrs. G. Hamel, Otago Regional Representative of the Ornithological Society of New Zealand, circulates information about the Pacific bird banding program through her local news bulletin, thus keeping local coastal farmers and lighthouse keepers aware of the program.

The Pacific Bird Observer is a newsletter distributed to collaborators of the Pacific Ocean Biological Survey Program of the Smithsonian Institution in order to promote a better understanding of birds and their relation to man in the Pacific.

## WHAT TO DO IF YOU FIND A BAND

What do you do if you find a live banded bird?

Do not remove the band, but read the number on the band, write it down, and release the bird carefully. Hopefully, the banded bird will be caught again elsewhere. Remember, don't take the band off: you might injure the bird. Please send in the following information:

1. Your name and address  
(plainly printed)
2. All letters and numbers  
on the band.
3. The date you found the bird.
4. The place where you found  
the bird.
5. How you obtained the bird.

PLACE THIS INFORMATION IN AN  
ENVELOPE AND SEND IT TO THE  
ADDRESS ON THE BAND.

If you find a band on a dead bird, straighten the band out and tape it securely to a piece of heavy paper. Send the following information with the band:

1. Your name and address  
(plainly printed)
2. All letters and numbers  
on the band.
3. The date you found the  
band.
4. The place where you found  
the band.
5. Tell how you obtained the  
band (on a bird found  
dead -- shot, trapped,  
etc.)

PLACE THIS INFORMATION AND THE  
BAND IN AN ENVELOPE AND SEND  
IT TO THE ADDRESS ON THE BAND.

If the band you found was that of the U.S. Fish and Wildlife Service you will receive a letter from the Bird Banding Laboratory telling where the bird was banded, what kind it was, and who banded it. The Smithsonian's Pacific program, or whoever banded it, will also learn that you found the band.

Please do not send bands of band numbers to the Smithsonian Institution. This may cause confusion with other banding programs operating in the Pacific.

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## FORMER EDITOR LEAVES

Mrs. Tina C. Clapp, former editor of the Pacific Bird Observer, has left the Pacific Ocean Biological Survey Program to accept another position. We thank her for five fine issues of the Pacific Bird Observer, to which she devoted much of her time, and wish her the best of luck in her new endeavors.



## Adult Red-tailed Tropicbird and Chick

This is an adult Red-tailed Tropicbird with its chick in the nesting hollow under a rock ledge. The dark spot on the adult's head shows that it has been banded. Since both parents may be found brooding the chick in this species, the POBSP, when banding, marks the banded parent. When the unbanded parent arrives, it is conspicuous because of its unmarked forehead, and can easily be singled out for banding. Photo by R. Clapp.

